

wherein SOD' is a residue of superoxide dismutase; Q is a chemical crosslinking; B is a residue without a hydrogen atom of a hydroxyl group of lysolecithin having the hydroxyl group at the 2-position of glycerol; m is an average number of bonds of lysolecithin to one molecule of superoxide dismutase which is a positive number of 1 or more;

A 1 (a) property: when water for injection is added to one which lyophilized the drug composition, the one is dissolved with no insoluble foreign substances;

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10 (b) stability: when a superoxide dismutase activity per unit weight immediately after lyophilizing the drug composition is set as 100, relative values of the activity after the lyophilized drug composition is stored at 8°C for 12 months, 25°C for 12 months or 40°C for 6 months are all 97% or more;

(c) peaks of analogues in gel filtration chromatography: when the lyophilized drug composition is re-dissolved and submitted to gel filtration chromatography and absorbance of the eluates is measured at 220 nm, no substantial difference is observed between a peak shape of lecithin-modified superoxide dismutase on a detection chart of the absorbance and a peak shape of lecithin-modified superoxide dismutase before lyophilization; and

(d) peaks of analogues by reversed phase chromatography: when the lyophilized composition was re-dissolved after it is stored at 8°C for 12 months, 25°C for 12 months or 40°C for 6 months and submitted to reversed phase chromatography and absorbance of the eluates is measured at 220 nm and 270 nm,

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each amount of detected analogues is not substantially different from that immediately after lyophilized.

2. (Amended) The drug composition according to claim 1 wherein all properties according to claim 1 remain after the lyophilized composition is stored at 8°C for 36 months, 25°C for 36 months or 40°C for 6 months.

3. (Amended) The drug composition according to claim 1 or 2 wherein the analogues are substances generated by cleavage of a lecithin part of lecithin-modified superoxide dismutase.

4. (Amended) The drug composition according to claim 1 or 2 wherein a fatty acid content in the drug composition is 0.13-0.15 $\mu\text{mol/mg}$ protein.

5. (Amended) The drug composition according to claim 1 or 2 wherein the drug carrier comprises sucrose.

6. (Amended) The drug composition according claim 1 or 2 wherein Q is $-\text{C}(\text{O})-(\text{CH}_2)_n-\text{C}(\text{O})-$, n being an integer of 2 or more.

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7. (Amended) The drug composition according to claim 1 or 2 wherein SOD' is a residue of human superoxide dismutase.

8. (Amended) The drug composition according to claim 1 or 2 wherein SOD' is a residue of a modified form of superoxide dismutase in which an amino acid in 111-position of an amino acid sequence of human superoxide dismutase is converted into S-(2-hydroxyethylthio) cysteine.

9. (Amended) The drug composition according to claim 7 wherein the superoxide dismutase contains copper and zinc at the active center.

10. (Amended) The drug composition according to claim 6 wherein n is an integer of 2 to 10.

11. (Amended) The drug composition according to claim 1 or 2 wherein m is a positive number of 1 to 12.

12. (Amended) The drug composition according to claim 5 wherein the sucrose has been treated with activated charcoal.

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13. (Amended) The drug composition according to claim 1 wherein the drug composition is lyophilized.

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14. (Amended) The drug composition according to claim 5 wherein a weight ratio of the lecithin-modified superoxide dismutase to sucrose is 0.4/100-60/100.

15. (Amended) A method for treating a disease comprising administering the drug composition according to claim 1 or 2.

16. (Amended) The method according to claim 15 wherein the disease is a motor neuron disease or ulcerative gastrointestinal injury.

17. (Amended) An agent having sucrose as an active ingredient for inhibiting a reduction of superoxide dismutase activity or for controlling appearances of peaks of analogues when analyzing the superoxide dismutase by column chromatography by making sucrose coexist with lecithin-modified superoxide dismutase represented by the following general formula (I):



wherein SOD' is a residue of the superoxide dismutase; Q is a chemical crosslinking; B is a residue without a hydrogen atom of a hydroxyl group of